

REMARKS

This is in response to the non-final Office Action mailed November 21, 2007. Claims 1, 2, 4-6, 8, 9, 11-17, 19, 22 and 23 are pending and rejected. By this response, Applicant has amended claims 1, 8 and 13 to further clarify Applicant's invention. The claims are fully supported by the original specification, and no new matter has been added as a result of these amendments.

In view of the foregoing amendments and the following discussion, Applicant submits that none of the claims now pending in the application are obvious under the provisions of 35 U.S.C. §103. Thus, Applicant believes that all of these claims are now in allowable form.

It is to be understood that Applicant does not acquiesce to the Examiner's characterizations of the art of record or to Applicant's subject matter recited in the pending claims. Further, Applicant is not acquiescing to the Examiner's statements as to the applicability of the art of record to the pending claims by filing the instant response.

35 U.S.C. §103 Rejection of Claims 1-2, 6, 8-9, 13-16, 19 and 22-23

Claims 1-2, 6, 8-9, 13-16, 19 and 22-23 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Sie et al. (6,973,662, hereinafter "Sie") in view of Thomas Huston et al. (US 2002/0007402, hereinafter "Thomas") and further in view of Gordon (5,920,700, hereinafter "Gordon"). Applicant respectfully traverses the rejection.

A. No Motivation to Combine

Applicant submits that there is no motivation to combine Thomas with Sie and Gordon because Thomas relates to a totally different business operation compared to those of Sie and Gordon. Specifically, Thomas is directed towards managing content for internet access and storing content in a limited cache space, while Sie and Gordon relate to managing programming assets and distribution through cable TV providers.

Differences in business operations between internet hosting and cable TV result in different resource configurations and problems to be addressed, and it would not have been obvious, at the time of Applicant's invention, to adapt selective features from internet browsing to the method of storing video assets for TV programming, as suggested by the Examiner.

In Sie's program distribution system, memory resources are separately managed by the content and cable TV providers. A content provider manages the delivery of additional content to specific set top boxes by means of a program server 132 and a program request database 136 (Fig. 1, col. 3, line 56 - col. 5, line 4). Programs from the additional content provider are stored on the content provider's program server, and interactions between the program server and the cable TV provider allow the transmission of additional programs to authorized users.

Gordon teaches an asset management system that includes scheduling, resource, configuration and reporting managers (e.g., Abstract). The asset management system, which is a part of an interactive TV operations center, dynamically manages assets, stores assets and optimizes placement of assets and availability to end users (e.g., col. 4, lines 38-67).

Notably, neither Sie nor Gordon suggests or contemplates any shared management responsibilities between the TV service provider and the content provider, and there is certainly no suggestion or perceived need for the content provider to lease any memory resource from the TV service provider.

This is different in the case of internet access in Thomas, in which it is clearly advantageous to have content readily available on an access provider's traffic server, and thus, desirable to have an agreement for content storage in a cache of the access provider.

Given the business and operational differences between TV programming and internet hosting, Applicant submits that the Examiner's suggestion of modifying Sie to provide a leased resource to a content provider for cable TV distributions can only be a result of hindsight based on Applicant's disclosure.

B. Combined teaching of Sie, Thomas and Gordon

Furthermore, Applicant respectfully submits that Sie, Thomas and Gordon, alone or in any permissible combination, fail to teach or suggest each and every element in Applicant's independent claims 1, 8 and 13.

Claim 1 has been amended to clarify Applicant's invention, and recites, in part: "wherein said usage statistics comprise data relating to at least identification of titles of video assets requested by subscribers and availability of said requested titles, and said content-centric data comprises data related to consumption of content including at least subscriber interest in certain content as well as date and time correlations associated with such subscriber interest;" and "adapting, by the at least one content provider, the content in the at least one partition based on said usage statistics and content-centric data."

Independent claims 8 and 13 have been amended to include similar features. Support for the amended claim language can be found in the original specification, e.g., at least on p. 13, lines 20-27; p. 14, lines 1-6; and p. 14, lines 25-30. No new matter has been added as a result of these amendments.

Applicant submits that the combined teaching of Sie, Thomas and Gordon fails to teach at least the features of:

"wherein said usage statistics comprise data relating to at least identification of titles of video assets requested by subscribers and availability of said requested titles, and said content-centric data comprises data related to consumption of content including at least subscriber interest in certain content as well as date and time correlations associated with such subscriber interest;

providing said usage statistics and content-centric data to said at least one content provider;

selecting, according to said at least one content provider, which video assets are stored in said leased resource;

at least one of increasing and decreasing a capacity of said memory resource in response to said usage statistics; and

adapting, by the at least one content provider, the content in the at least one partition based on said usage statistics and content-centric data."

The Examiner cited Thomas' paragraphs 0064-0070 and 0091, and p.2, para. 2 and p.14, para. 5 of Thomas' Provisional 60/176,666 for teaching that a content provider is informed of the usage statistics of their content and how the content is accessed by users.

Applicant submits that Thomas relates specifically to content hosting on the internet, which is a very different business operation from Applicant's invention relating to providing video assets via a cable TV system. Thus, the usage statistics and purpose of such statistics in Thomas are also fundamentally different from those in Applicant's invention.

In Thomas, the content from a content provider is stored in proxy caches of the access providers for access by users. Usage statistics refers to cache hit information, number of bytes served, amount of storage reserved, amount of storage used, duration of the storage and transfer rate compared to estimated transfer rate using origin server (e.g., Thomas Provisional, p.4, para. 2 and p.14, para. 5). As taught by Thomas, usage statistics is used for billing purposes.

By contrast, Applicant's invention relates to a method based on a shared management model between a cable television system operator and the content provider. In one embodiment, a content provider stores certain video assets in a leased partition of a server complex, and usage statistics and content-centric data are used by the content provider to adapt the content in the partition. Furthermore, in response to the usage statistics, the capacity of the memory resource is increased or decreased. As provided in claim 1, user statistics comprise data relating to at least identification of titles of video assets requested by subscribers and availability of said requested titles.

There is no teaching in Thomas of usage statistics being related to titles of video assets and their availability.

The Examiner also interpreted "usage statistics/requests/access statistics" in Thomas as being the same as Applicant's content-centric data (Office Action, p. 5, lines 11-12). Applicant disagrees with such an interpretation.

Specifically, Applicant's content-centric data includes at least subscriber interest as well as date and time correlations associated with such subscriber

interest. There is no teaching in Thomas that the usage statistics includes subscriber interest in certain content and the date and time correlations with such interest.

Examiner stated that Sie and Thomas fails to explicitly disclose increasing and decreasing a capacity of the memory resource in response to the usage statistics, and adapting the content in at least one partition based on the usage statistics and content centric data. Thus, Examiner cited Gordon's col. 8, line 40 - col. 9, line 13 for allegedly teaching these missing features (page 7, Office Action).

Applicant respectfully disagrees.

Specifically, in Gordon, a usage manager ensures optimal storage/space configuration by monitoring actual asset usage of certain assets. If the number of certain unused copies of a given asset exceeds a minimum allowed number, then the excess copies will be removed, while additional copies of other popular assets may be added (e.g., col. 8, line 41 - col. 9, line 12). Thus, Gordon teaches the efficient use of available storage space. This is different from decreasing or increasing a partition size or space allocation.

Gordon also teaches, in col. 4, lines 59-67 and Fig. 3, an asset management system 100 that dynamically manages assets, stores assets, optimizes placement of assets and dynamically optimizes asset availability to end users, and that the interactive TV (ITV) operations center 20 manages the distribution of asset to various network hubs and headends, with the ITV operations center being the focal point of the asset management system 100 (col. 4, lines 38-67). In other words, in Gordon, the ITV operations center is the entity that manages, through the usage manager and resource manager, the storage space configuration.

This is very different from Applicant's claimed invention, in which usage statistics is provided to the content provider, and the content provider is the entity that adapts the content in the partition based on the usage statistics and content-centric data.

Thus, even if combined with Gordon, Sie and Thomas would still not have resulted in Applicant's claim 1.

Furthermore, Thomas teaches that storage quotas are used to guarantee a minimum amount of space to certain content providers, and content is deleted when no space is available. (See Thomas, paragraph 63.)

Thus, even though access statistics is provided to the content provider (e.g., Provisional, p.4), Thomas does not use such statistics to increase or decrease storage capacity. Instead, all that Thomas teaches is to delete certain content when there is insufficient storage capacity.

Such an approach is totally opposite to that in Applicant's invention, which provides for increasing or decreasing the capacity of the memory resource in response to the usage statistics.

In fact, given that a minimum storage space is guaranteed in Thomas, one skilled in the art, after reading Thomas, would not have found it obvious to provide for decreasing the capacity of the memory resource, even if usage statistics suggest such a need.

In other words, there is also no motivation for one skilled in the art to combine the cache space in Thomas with Gordon's approach of increasing and decreasing the number of copies of a video asset in response to usage statistics.

Thus, considering the teachings of Sie, Gordon and Thomas in their proper contexts, one skilled in the art would not find it obvious to select the respective features from each reference, and combine them in the specific manner as suggested by the Examiner, except for the benefit of hindsight derived from Applicant's disclosure.

Furthermore, as discussed above, the combined teachings of Sie, Thomas and Gordon still do not teach each and every feature in Applicant's claim 1. Therefore, independent claim 1 is patentable over the combination of Sie, Thomas and Gordon under §103.

Independent claims 8 and 13 recite relevant limitations similar to those recited in independent claim 1. As such, for at least the reasons discussed above, claims 8 and 13 also are not obvious and are patentable over the combination of Sie, Thomas and Gordon under 35 U.S.C. §103.

Furthermore, claims 2, 6, 9, 14-16, 19 and 22-23 depend, either directly or indirectly, from independent claims 1, 8 and 13 and recite additional features. Since Sie in view of Gordon and Thomas do not render obvious Applicant's invention as recited in claims 1, 8 and 13, dependent claims 2, 6, 9, 14-16, 19 and 22-23 are also not obvious and are patentable over Sie in view of Thomas and Gordon under 35 U.S.C. §103.

As such, Applicant respectfully requests that the rejection be withdrawn.

35 U.S.C. §103 Rejection of Claims 4-5 and 11-12

Claims 4-5 and 11-12 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Sie in view of Thomas and Gordon as applied to claim 1 or claim 8 above, and further in view of Carlin et al. (U.S. 6,119,152, hereinafter "Carlin"). Applicant respectfully traverses the rejection.

Claims 4-5 and 11-12 depend directly or indirectly from independent claims 1 and 8. Moreover, for at least the reasons discussed above, Sie in view of Thomas and Gordon do not render obvious Applicant's invention as recited in claims 1 and 8. Accordingly, any attempted combination of the Sie, Thomas and Gordon references with any other additional references in a rejection against the dependent claims would still result in a gap in the combined teachings in regards to the independent claims. As such, Applicant submits that dependent claims 4-5 and 11-12 are not obvious and are patentable over Sie in view of Thomas and Gordon and further in view of Carlin under 35 U.S.C. §103.

Therefore, Applicant respectfully requests that the Examiner's rejection be withdrawn.

35 U.S.C. §103 Rejection of Claim 17

The Examiner has rejected claim 17 under 35 U.S.C. §103(a) as being unpatentable over Sie in view of Thomas and Gordon as applied to claim 13, and further in view of Martin et al. (U.S. 6,606,607, hereinafter "Martin"). Applicant respectfully traverses the rejection.

Claim 17 depends directly from claim 13. Moreover, for at least the reasons discussed above, the Sie reference do not render obvious Applicant's claimed invention as a whole as recited in independent claim 13. Accordingly, any attempted combination of the Sie reference with any other additional references in a rejection against the dependent claims would still result in a gap in the combined teachings in regard to the independent claims. As such, Applicant submits that dependent claim 17 is patentable over Sie in view of Thomas and Gordon as applied to claim 13, and further in view of Martin under 35 U.S.C. §103.

Therefore, Applicant respectfully requests that the Examiner's rejection be withdrawn.

SECONDARY REFERENCES

The secondary references made of record are noted. However, it is believed that the secondary references are no more pertinent to Applicant's disclosure than the primary references cited in the Office Action. Therefore, Applicant believes that a detailed discussion of the secondary references is not necessary for a full and complete response to this Office Action.

CONCLUSION

In view of the foregoing remarks, Applicant believes that this application is in condition for allowance. Reconsideration of this application and allowance are respectfully solicited.

If, however, the Examiner believes that there are any unresolved issues requiring adverse final action in any of the claims now pending in the application, it is requested that the Examiner telephone Eamon J. Wall at (732) 530-9404 so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,

Dated:

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